

To: Mr. Werner Gurtner

ILRS Governing Board Chairman

Astronomical Institute -University of Berne

Sidlerstrasse 5 CH-3012 Bern Switzerland

c.c.: IGS Central Buro

Dr Mike Pearlman

Harvard-Smithsonian Center for Astrophysics

60 Garden Street Cambridge MA 02138

U.S.A.

Noordwijk, 5 October 2004

Dear Dr. Gurtner,

Subject: LASER Tracking Support for Galileo

On behalf of the Galileo Project Office at the European Space Agency Technical Centre (ESA/ESTEC) we kindly ask for the support of the International Laser Tracking Stations (ILRS) community in laser- tracking Galileo satellites.

The support by ILRS would already be needed for the experimental satellites of Galileo within the Galileo System Test Bed - the GSTB V2/A and the GSTB V2/B satellites planned to be launched in the 4^{th} quarter of 2005 with a nominal mission lifetime of 2 years.

It would need to be continued during the In-orbit Validation Phase of Galileo (IOV Phase), where a total of 4 Galileo satellites are envisaged. The IOV satellites are planned for launch towards the end of 2007 with a subsequent IOV campaign of 6 months, followed by the Full-Deployment Phase and the Long-term Operations Phase of the entire satellite constellation.

All GSTBv2 and Galileo satellites are equipped with laser retro reflectors and laser-tracking observations from ILRS are planned to be used for characterisation of the orbit and clock determination process.

Find enclosed the relevant specifications on the laser retro reflectors on-board the satellites and the satellite orbit. We kindly ask your support to assess the feasibility of laser ranging from the ILRS available list of tracking stations and confirm to the Galileo Project Office your support.

Counting on your assistance and time to establish a fruitful co-operation,

Best Regards,

Javier Benedicto

Galileo Project Manager

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